REMARKS

Applicants offer the following remarks responsive to the Office Action dated June 15, 2004 and the Advisory Action dated September 9, 2004. Applicant further incorporate all prior remarks from the response filed on July 26, 2004. Applicants add new claims 39-63 to claim other embodiments. Claims 1-5, 8-10, 13, 15, 16-19, 22-23, 27, 28-31, 34-35, 37-38 and 39-63 are pending in the application. Reconsideration of the application is respectfully requested.

Art-based Rejections

The Official Action rejects claims 1 and 38 under 35 U.S.C. 102(e) as allegedly being anticipated by the Hsu et al. publication (US 2003/0054807) (hereinafter "Hsu"), rejects claims 1-3, 5, 15-17, 19, 27-29, 31, 37 and 38 under 35 U.S.C. 103(a) as being unpatentable over the Sato et al. publication (WO 01/80590 A1) (hereinafter "Sato") in view of Hsu, and rejects claims 4, 8-10 and 13, 18, 22, 23, 30, 34 and 35 under 35 U.S.C. 103(a) as being unpatentable over Sato further in view of Hsu and Chang et al. (U.S. Patent Publication 2002/0102967).

Claims 1, 16, 28 and 38

Claim 1 relates to a method in a wireless communication system that supports a broadcast service. This method comprises:

> providing a BCMCS ID to identify the broadcast service, **wherein an IP multicast address and UDP port number are associated with said BCMCS_ID**;
> sending the BCMCS ID to a base station;
> configuring a broadcast service parameters message at the base station that includes the BCMCS ID;
> transmitting the **broadcast service parameters message** to a mobile station; and
> using the BCMCS ID in the broadcast service parameters message at the mobile station to determine availability of the broadcast service in an adjacent sector. (Emphasis added.)

As discussed at paragraphs 1067 and 1068 of the specification, associating the BCMCS_ID with an IP multicast address and UDP port number can allow a mobile station to obtain the BCMCS_ID, IP multicast address, and UDP port number of a broadcast/multicast service via an out-of-band mechanism. The MS may obtain the mapping between the BCMCS_ID and the physical channel parameters via IS-2000 Layer-3 signaling. Using a

BCMCS_ID with these associations avoids a layering violation that occurs when IP addresses and port numbers (or text-based service names in the IS-2000 Layer-3 signaling) are used to associate a broadcast/multicast service and physical channel parameters. Using a BCMCS_ID with these associations may also decrease signaling overhead by eliminating up to 10 bytes required to identify a service by its source/destination addresses and port numbers, or eliminating a large number of bytes that may be required to identify a service by its text-based service name. (Emphasis added.)

The Rejection

In rejecting claim 1 the Office Action dated June 15, 2004 cites ¶60 of the Hsu reference. Paragraphs 0058 through 0060 of Hsu state:

> [0058] FIG. 4 illustrates a message sequence diagram, shown generally at 102, of an embodiment of the present invention. The **message sequence diagram represents MBS set up and monitoring** that is performed pursuant to an embodiment of the present invention.
>
> [0059] First, and as indicated by the segment 104, a primary service instance, designated by the segment 104, is initiated by the mobile station. Segments 106, 108, and 112 are representative of MBS setup procedures, here a header compression, an RTSP exchange, and security signaling, respectively. The primary service instant initiation request generated by the mobile station is also generally considered to form part of the MBS setup.
>
> [0060] Then, and as indicated by the segment 114, a **broadcast service parameter message**, is generated, here by the base station controller/packet control function 22 and sent to the mobile station. The message **includes one or more of the common service parameters and channel-specific parameters**. Thereafter, and as indicated by the segments 116, multibroadcast service traffic is effectuated between the data server 32 and the mobile station 12. RTP/UDP/IP **header compression** is here further shown to be utilized. (Emphasis added.)

In the Office Action dated June 15, 2004, the Office responds to Applicants' arguments filed on April 22, 2004 by stating that:

> "As taught by Hsu in paragraphs 59 and 60, MBS traffic is sent from the service provider in which the MBS traffic includes a RTP/UDP/IP header, (fig. 4). As stated also in paragraph 13 of Hsu, Multicast and Broad services (MBS) is also referred to as Broadcast and Multicast Services (BCMCS). Therefore, it is clear

that as least paragraphs 59-60 and fig. 4, teaches using a BCMCS_ID service and wherein an IP multicast address and UDP port number are associated with the BCMCS, ("IP multicast address and UDP port number are associated with said BCMCS_ID"). Furthermore, as further explained below, the MBS ID identifies a broadcast service since the MBS comprises a broadcast service message.

As shown in paragraphs 20-22, the broadcast service parameter message (MCMCS_ID) has multiple fields which includes a common service parameter and a transport channel-specific parameter. The common service parameter includes parameters that identify at least the BCMCS service and information on what channels the MBS will be communicating, ("providing a BCMCS_ID to identify the service"). Therefore, the broadcast service parameter message of Hsu identifies the service.

Therefore, the Examiner believes and maintains that Hsu teaches of providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID."

In the Advisory Action dated September 9, 2004, the Office responds to Applicants' arguments filed on July 26, 2004 by stating that:

"Applicant contends that Hsu does not teach or suggest that an IP multicast address and UDP port number are associated with said BCMCS_ID. The Examiner respectfully disagrees.

The broad limitation of association an IP multicast address and UDP port number is clearly shown by Hsu since Hsu at least teaches of using the RTP/UDP/IP header message and address message with the broadcast/multicast service parameter message. Since this information is used along with the message then the RTP/UDP/IP message is "associated" with the BCMCS_ID.

An Applicant's response, on the bottom of page 8 through the top of page 9, reference is made to their specification for associating the BCMCS_ID with an IP multicast address and UDP port number. However, none of those limitations are in the claims nor can they be read into interpreting the claims since the claims merely states of associating an IP multicast address and UDP port number with the BCMCS_ID and none of the limitations in the cited areas of the specification are recited in the pending claims." (Paragraphs 3-5 of Advisory Action dated September 9, 2004; Emphasis added.)

Applicant's Arguments in Response to the Advisory Action

Applicant agrees that paragraphs 20-22 of the Hsu reference disclose a broadcast service parameter message. This broadcast service parameter message has multiple fields which include **a common service parameter** and a transport channel-specific parameter. In particular,

paragraph 21 of the Hsu reference discloses that "[c]ommon service parameters include, for instance, parameters **identifying multicast group information**." (Emphasis added.) Nevertheless, Applicant respectfully traverses these rejections for at least the following reasons.

Applicant submits that the Hsu reference does not teach or even remotely suggest that "an IP multicast address and UDP port number are **associated with** said BCMCS_ID," as required in claim 1.

Neither the broadcast service parameter message, common service parameter nor the transport channel-specific parameter taught by the Hsu reference are associated with "an IP multicast address and UDP port number," as recited in claim 1. This feature of claim 1 can provide a mobile station with a mapping between the BCMCS_ID and an IP multicast address and UDP port number. This association can reduce the signaling overhead **needed to send IP addresses and UDP port numbers** to identify the broadcast service.

By contrast, the Hsu reference fails to specify how the broadcast service is identified, and in no way suggests that an **association** (between an identifier for a broadcast service and an IP multicast address and UDP port number) can be used to identify the broadcast service. Contrary to the Examiner's assertions, FIG. 4 of the Hsu reference does **not** even remotely suggest that the RTP/UDP/IP header is **associated with** the common service parameter message, or that the IPMC address and UDP port number are **associated with** a BCMCS_**ID.** The Hsu reference merely establishes that the general concept of utilizing "RTP/UDP/IP header compression" is known.

For at least the foregoing reasons, Applicant submits that nothing in the cited references would suggest that "an IP multicast address and UDP port number are **associated with** said BCMCS_ID," as required by claim 1. Because the cited references fail to teach or suggest at least the above recitations of claim 1, Applicant respectfully submits that claim 1 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 2-5, 8-10, 13, and 15 are separately patentable at least by virtue of their dependency from independent claim 1, and also because those claims include features that are neither taught nor suggested by the cited references.

Applicant further submits that independent claims 16, 28, and 38 are patentable for at least the same reasons, and that dependent claims 16-19, 22-23, 27; and 28-31, 34-35, 37-38 are patentable at least by virtue of their dependency from independent claims 16 and 28, respectively.

New Claims 39-63

New claim 39 requires "providing a BCMCS_ID comprising mapping information between an IP multicast address and a UDP port number associated with the broadcast service." Applicant respectfully submits that the cited references fail to teach or suggest at least the above recitations of claim 39. Accordingly, Applicant respectfully submits that claim 39 is patentable over the cited references. In addition, Applicant respectfully submits that dependent claims 40-48 are separately patentable at least by virtue of their dependency from independent claim 39, and also because those claims include features that are neither taught nor suggested by the cited references.

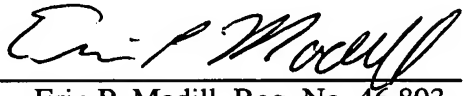
Applicant further submits that independent claims 49, 56 and 63 are patentable for at least the same reasons, and that dependent claims 50-55; and 57-62 are patentable at least by virtue of their dependency from independent claims 49 and 56, respectively.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: October 14, 2004

By: 

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